FOR MYSORE STATE

3-11-53.

PUBLIC WORKS **(1954) Department.**

MS **SERIES.**

G.O. No. 1846

Dated 21st May 1954

Passed
Kew
Sujdt
3
4-6-54

[Despatch Abstract]

Communications - Bridges - South Kanara District - Reconstruction of bridge at mile 65/3 of Kalladka Kanhangad Road - Revised Estimate for Rs.66,000/- Approved.

"HIGHWAYS DEPARTMENT"

From
Sri K.K. Nambiar, B.E., M.I.E.(Ind),
F.Inst.T.E.(Eng) M.I.Mun.E.(Eng),
M.Am.Soc.C.E.,
Chief Engineer (Highways),
Chepauk, Madras.5.

GOVT. ASST. SECRETARY TO
21 APR 1954
PUBLIC WORKS DEPARTMENT

To The Secretary to Government,
Public Works Department,
Fort. St. George,
Madras.9.

Letter No.64449 E1/53-2 dated 10.4.54.

Sir,

Sub: Reconstructing the bridge at M.65/3 of Kallidam - Kanhangad Road, section of Bombay Cape Comorin road - Revised Administrative approval requested.

31945

Ref: Roc.98-3506/51 dated 12.12.53 of Superintending Engineer (Highways) Coimbatore.

****

I submit herewith a revised estimate for Rs.66,000/- for the above work for revised administrative approval.

The work was first administratively sanctioned in G.O.Ms. No.2207 P.W. dated 1.6.51 for Rs.50,500/- and technical sanction was accorded by the Superintending Engineer (Highways) for an amount of Rs.57,000/-.

The necessity for preparing a revised estimate is mainly due to the acceptance of higher contract rates, which are 30.43% above the sanctioned estimate rates. The other features involving the increase in the revised estimate are minor in nature and are clearly explained in the specification report accompanying the estimate.

The work on the above bridge is nearing completion.

Under these circumstances and in view of para 5 of letter of the Government of India to State Government No.HW-3(15)/53 dated 29.1.54, I request that the revised administrative approval of the Government may be obtained and communicated to me early.

for Chief Engineer (Highways).

Encl..1 estimate.
Roc.10.1.

66,000
50,500
15,500 + 180
65,680
30.7
515) 1550
1515
350

Report to accompany the revised estimate for reconstructing the bridge acro s Chittar at Mile 65/1 of Kalladka Kanhangad road (P.W.D section of Bombay Cape Comorin road in South Kanara District.

Original estimate: Rs.51,000/-
Revised estimate: Rs.68,000/- 66,m

The original estimate for Rs. 51,000/- was sanctioned by the Superintending Engineer (N) Coimbatore in C.R.No.8/51-52 adopting 1951-52 schedule of rates.

This work was entrusted on contract to Sri.K.Ananath Kurty, Kasargod at 32.48 above estimate rates and agreement executed in C.R.No.47/51-52. The estimate has been revised now for the following reasons.

(1) The original estimate provided for wearing coat with cement concrete (1:2:4) mix with 3/4" size hard granite broken stone laid to a thickness of 3" at the centre and 2" thick at the edges of the slab. It is now proposed to provide wearing coat with cement concrete (1:1½:3) mix with 66 2/3% of 1" size and 33 1/3% of 1/2" size hard granite broken stone laid to a thickness of 3½" at the centre and 2½" at the edges as per instructions issued by the Consulting Engineer (Roads) Government of India and the Chief Engineer (N) Madras in the case of constructing a bridge at M.49/2-3 of Mangalore Agumbe road section of Bombay Cape Comorin road. The rate for this item allowed in the revised estimate is a reasonable rate derived from the original tender rate as worked out in the data sheet enclosed.

(2) In the original estimate no provision was made for regrading approaches of the bridge. Now in the present revised estimate a lump sum of Rs. 2,000/- is allowed for regrading the approaches on either side of the bridge.

(3) Apart for the above deviations, the high tender premium of 32.48% accepted for the above work also accounts for the revision of the estimate and increase in amount.

The whole work will be executed as per M.D.S.S. and other relevant specifications and circulars.

Sd.S.C.Nayak,
Superintending Engineer (N)

/True copy/

1.1.54
Personal Assistant.

N.S./22.12.53.

(Sd.) K.K. Nambiar.
Chief Engineer (Highways)

28/12

/True copy/

Technical Assistant to Chief Engineer (Highways)

DETAILED ESTIMATE.

District Taluk

Village and Survey No. Reconstructing the bridge Date and cost of original construction

Name and number of work Bombay Cape Covering Date and cost of last repairs

Details of work.	Number.	Measurement in feet.			Area or contents.	Total quantity of each description of work.
		Length.	Breadth.	Depth.		
1. Earth work excavation for foundations in all soils, excluding rock requiring blasting below water level including all leads and lifts (as per original estimate)		L.S.			5000 Cft.	
Earth work excavation for foundation in all soils, excluding rock requiring blasting below water level including all leads and lifts and bailing and pumping charges etc. complete.(as per original estimate)		L.S.			9000 Cft.	
Quarrying rock in foundation. (as per original estimate)					750 Sft.	
Cement concrete 1:3:6 with 1½" size hard granite broken stone for foundations abutments, wings, and piers including bailing and pumping etc. complete concrete.(as per original estimate)					600 Cft.	
Coursed rubble masonry in C.M. 1:5 second sort with hard granite stone including simultaneous pointing for abutments and wings. (as per original estimate)					9300 Cft.	
Dressed rubble masonry in C.M.1:5 first sort and granite stones including simultaneous pointing for piers and abutments. (as per original estimate)					35 0 Cft.	
Cement concrete 1:3:6 mix with 1½" size hard granite broken stone for filling concrete over piers and abutments. (as per original estimate)					120 Cft.	
Reinforced cement concrete (1:2:4) mix with 3/4" size hard granite broken stone inclusive of cost of materials, form work, bending, tying and fixing rein orcement as specified.						
(a) For deck slab and kerb with 7.2 lbs. steel per cft. of concrete. (as per original estimate)					2340 Cft.	
(b) For hand rails and posts with 3½.5 lbs. steel per cft. of concrete.(as per original estimate)					70 Cft.	
Cement concrete 1:1:2:3 mix with 66 2/3% of 1" size and 33 1/3% of 1/2" size hard granite broken stones including cost, and conveyance of all materials to site for wearing coat of verdeck slab.						

Details of work	No.	Length	Breadth	Depth	Or contents	Nature of work
Over deck slab and abutments.	1	66-0	2-0	3½ 3½ / 2 or 3(ave)	3/3	363 Cft.
10. Gravel backing 6" thick to rought stone dry packing (as per original estimate)						7100 Cft.
11. Rough stone dry packing 1'-0" thick for abutments over 6" thick gravel backing (as per original estimate)						28.0 Cft.
12. Dismantling the old dilapidated bridge structure.						L.S.
13. Cutting the Peduguai on the upstream side of the right ak bank ie. training the river to run.						L.S.
14. Providing approach roads on either side						L.S.
15. Construction of temporary sheds for tools and plants etc.						L.S.
16. Contingencies and unforseen charges.						L.S.
17. Forming and maintaining diversions (on actuals						L.S.
18. Petty supervision charges.						L.S.

Sd. S.C.Nayak,
Superintending Engineer (H)

True copy/

R Thillainayagam 7.1.54

Personal Assistant.

../22.12.53.

(a) Sanctioned estimate rate for C.C. 1:2:4 mix with 3/4" size metal for wearing coat. — 250--0--0/100

Deduct cost of cement as per detail. — 92-11--3

Rate excluding cost of cement which will be supplied departmentally at a specific rate. — 127--4--9/100

(b) Accepted rate for C.C. (1:2:4) mix with 3/4" jelly for wearing coat. — 250--0--0/100

Deduct cost of cement as above. — 92-11-3

Rate of contractor excluding cost of cement should have been. — 157--4--9

Percentage excess for this item over the corresponding sanctioned rate. — $\frac{(157-4-9 - 127-4-9) \times 100}{127-4-9}$

(c) Estimate rate for wearing coat with C.C.(1:2:3) mix with 66 2/3% of 1" size and 33 1/3% of 1/2" size broken stone allowing 1951-52 schedule of rate as allowed in the sanctioned estimate at the time of tendering.

Estimate rate for C.C.(1:2:4) mix for wearing coat with 3/4" size jelly excluding cost of cement as above. — 127--4--9/100 Cft.

Deduct cost of 3/4" jelly as per detail. — 87--1-11

40--2-10

Add for

(1) Cost of 66 2/3% of 1" size broken stone at Rs. 78-12-0/100 Cft. — 52-8--0

(2) Cost of 33 1/3% of 1/2" size broken stone at Rs. 103-12-0/100 Cft. — 34-9--4

Total excluding cost of cement. — 127--1--3/100 Cft.

33 1/3 % Add cost of cement at the recovery rate of Rs. 96-8-0 per ton. — 129--3--10

Total including cost of cement. — 256--8--0/100 Cft.

Estimate rate excluding cost of cement for wearing coat C.C. 1:2:3. — 127--4--2

The rate excluding cost of cement for the wearing coat with C.C. 1:2:3 allowing the same percentage at P overleaf. — $\frac{157-4-9 \times 127-4-2}{127-4-9}$

157--4--0

Add cost of cement as above. — 129--3-10

256--7-10 or Rs. 256--8--0/100 Cft.

P.T.O.

Data III.

Data worked out as per Chief Engineer's (H) latest circular date 3--2--1953.

Estimate rate for wearing coat with C.C.1:1½:3 mix including cost of cement as in the previous data I.	256--8--0/100
Add tender premium of 32.48% accepted for the work.	83--5--0
Total.	339-13--0/100

In the estimate the lowest and reasonable rate of Rs. 256-8-0/1 Cft. as per data No.I. is adopted which may please be approved.

Sd.S.C.Nayak,
Superintending Engineer (H)

/True copy/

R. N. Kulkarni
Personal Assistant.

R.S./22.12.53.

26/12

Work: Reconstructing the bridge across Chittar at M.65/3 of Kelladka Kanhangad road.

Abstract.

Item	Quantity.	Description of work.	Rate.	Per.	Amount.	To
	2.	3.	4.	5.	6.	7.
	500 Cft.	Earthwork excavation for foundation in all soils, excluding rock requiring blasting above water level including all leads and lifts.	25-0-0	100 Cft.	125-0-0	
	4500 Cft.	Earthwork excavation for foundation in all soils excluding rock requiring blasting below water level including all leads and lifts and bailing and pumping charges etc. complete.	500-0-0	1000 Cft.	4500-0-0	
	750 Cft.	Benching rock in foundation.	2-0-0	One cft.	1500-0-0	
	600 Cft.	Cement concrete 1:3:6 mix with 1½" size hard granite broken stone for foundations under abutments wings and piers including baling and pumping etc. charges complete.	180-0-0	100 Cft.	1080-0-0	
		Coursed rubble masonry in C.M. 1:5 second sort with hard granite stone including simultaneous pointing for abutments and wings.	190-0-0	"	17670-0-0	
	6.3/6	Coursed rubble masonry in C.M. 1:5 First sort with hard granite stones including simultaneous pointing for piers and abutments cutwaters	210-0-0	"	7350-0-0	
	7.120	Cement concrete 1:3:6 mix with 1½" size hard granite broken stone for levelling course over piers and abutments.	180-0-0	"	216-0-0	
		Reinforced cement concrete 1:2:4 mix with 3/4" hard granite broken stone inclusive of cost of material, formwork, bending tying and fixing reinforcement as specified.				
(a)	2340 Cft.	For deck slab and kerb with 7.2 lbs. of steel per cubic foot of concrete.	7-0-0	Cft	16380-0-0	
(b)	70 Cft.	For hand rails and posts with 31.5 lbs. of steel per cft. of concrete.	25-0-0	"	1750-0-0	
	363 Cft.	Cement concrete 1:1½:3 mix with 66 2/3% of 1" size metal and 33 1/3% of 1/2" size hard granite broken stone including cost and conveyance of all materials to site for wearing coat over deck slab.	286-8-0	"	1040-0-0	
	1100 Cft.	Gravel backing 0'-6" thick to rough stone dry packing.	25-0-0	100 Cft	275-0-0	
11.	2800 Cft.	Rough stone dry packing 1'-0" thick for revetments over 6" gravel backing.	95-0-0	"	2660-0-0	
12.	L.S.	Dismantling the old dilapidated bridge structure.			1000-0-0	
13.	L.S.	Cutting the Padurai on the upstream side of the right bank ie. training the river to run square to the axis.		L.S.	1000-0-0	

2. 3. 4. 5.

B.).

~~[illegible]~~		~~[illegible]~~ 50,546-0-0
...erroding approach roads on either side of the bridge.	L.S	2,000-0-0
Construction of temporary sheds for storing tools and plants etc.	"	1,000-0-0
Contingencies and unforseen works.	"	~~2,204-0-0~~ ~~3,500-0-0~~
...ornire and maintaining diversions (as per actuals)	"	3000 ~~2,204-0-0~~ ~~3,500-0-0~~ 1250-0-0
...erty compensation charges.	"	~~4,500-0-0~~
	Total.	66,000-0-0

...upees sixty ~~eight~~ six thousands only.

Sd.S.C. Nayak,
Superintending Engineer (...)

...ue copy/

B. Krishnaiyer
Personal Assistant.

...53.

(Sd) K. K. Nambiar,
Chief Engineer (Highways)

True copy.

L. V. Sridharan
Technical Assistant to Chief
Engineer (Highways)

tion	Item No.	Original estimate. Quantity.	Rate	Am
1)	(2)	(3)	(4)	
				8.
Reconstructing the bridge across Chittar at mile 56/3 of Kalladka				
Earthwork excavation for foundation in all soils excluding rock requiring blasting above water level including all leads and lifts.	1.	5000 C.ft.	17-8-0	87
Earthwork excavation for foundation in all soils excluding rock requiring blasting below water level including all leads and lifts.	2	9000 C.ft.	21-13-0	19
Sheeting, shoring etc.,	2(a)	L.S.		400
Breaking rock in foundation.	3	750 C.ft.	1-4-0	9
Cement concrete(1:3:6)mix with 1½" size hard granite broken stone for foundation under abutments and wings, and piers including baling and pumping charges.	4	600 C.ft.	165-0-0	9
Coursed rubble masonry in cement mortar(1:5) second sort with hard granite stone including simultaneous pointing, for abutments and wings.	5	8500	145-8-0	139
Coursed rubble masonry first sort in cement mortar(1:5) for piers and cut waters including simultaneous pointing.	6	3500	164-0-0	874
7. Cement concrete(1:3:6) mix with 1½" size hard granite broken stone for levelling course over piers and abutments.	7	120	165-0-0	19
8. Reinforced cement concrete(1:2:4) mix with 3/4" hard granite broken stone inclusive of cost of materials form work, bending, tying and fixing reinforcement as specified.				
a)For deck slab and kerbs.	8(a)	2040	4-14-0	11
b)For hand rails and posts.	8(b)	70	14-8-0	1
9. Cement concrete(1:2:4) mix with 3/4" size hard granite broken stone for wearing coat.	9	300 C.ft.	220-0-0	6
9(a) Cement concrete(1:1½:3) mix with 66-2/3% of 1" size and 33-1/3% of 1/2" size hard granite broken stone including cost and conveyance of all materials to site for wearing coat over deck slab.				

Revised estimate.			More	Less	Explanation of difference.
Quantity. (6)	Rate (7)	Amount. (8)	(9)	(10)	(11)
	Rs.	Rs.	Rs.	Rs.	
Road ( ) Section of B.C.C.road in South Kanara district.					
5000 C.ft.	25-0-0	125	38	-	Due to tender premium only.
9000 C.ft.	500-0-0	4500	4204	-	Original estimate rate did not include provision for baling, strutting etc., charges and also due to tender premium.
				1000	This is included in the contractor's rates which are adopted in the revised estimate.
750 C.ft.	2-0-0	1500	882	-	Due to tender premium.
675 C.ft.	100-0-0	1040	90	-	-do-
4300	190-0-0	17670	4417	-	-do-
3500	210-0-0	7350	1610	-	-do-
120	150-0-0	216	18	-	-do-
340	7-0-0	16320	4972		-do-
7	25-0-0	1750	735		-do-
					This item is deleted and substituted by the next item9(a) below.
103	296-8-0	1040	1040		This is provided in lieu of item 9 above.

P.T.O.

(1)	(2)	(3)	(4)	(5)
10. Gravel backing 6" thick to rough stone dry packing.	10.	1100	16-8-0	[illegible]
11. Rough stone dry packing 1'-0" thick for revetment over 6" gravel backing.	11	2200	22-8-0	[illegible]
12. Dismantling the old dilapidated bridge structure.	12			[illegible]
13. Cutting the Padugai on the upstream side of the right bank i.e. training the river to run square to the axis.	13	L.S.		[illegible]
14. Regrading approach roads on either side of the bridge.	14	L.S.		1000
15. Construction of temporary sheds for storing tools and plants etc.,	15	L.S.		2346
16. Contingencies and unforeseen [illegible] works.	16	L.S.		3500
17. Forming and maintaining diversions (as per actuals).	17	L.S.		2500
18. Petty supervision charges.				
			Total	51,000

Budget amount of estimate already sanctioned.

Net amount requiring sanction.

(Rupees sixty ~~eight~~ thousand only) Rs. ~~68,000/-~~

True copy/Forwarded.

R.E./28-12-63.

(6)	(7)	(8)	(9)	(10)	
1100	25-0-0	275	115	-	Due to tender
2800	95-0-0	2660	350	-	
		1000	500	-	Provision increased meet the actual requirements found necessary.
L.S.		1000	800	-	-do-
L.S.		2000	2000	-	Found necessary during execution.
L.S.		1000	-	-	
L.S.		~~2954~~ 2204	~~600~~	141	In the revised estimate the provision of 3% is made instead of 5% in the original estimate.
L.S.		3000	-	500	Actuals were only less than the original estimate provision.
L.S.		~~2500~~ 1250	-	1250	In the revised estimate a provision of 2% is made instead of 5% in the original estimate
		65,000	~~21,551~~ ~~22,100~~ ~~548~~ 21,551 ~~17,000~~	~~5,100~~ 6551	
		51,000			
		17,000			

J.C. Nayak,
Supdg.Engr(N)Coimbatore.

1.1.54

Personal Assistant.
(Sd) K.K. Nambiar,
Chief Engineer (Highways)

V. Padmanabhan
1/1/54
Asst to C.E (Highways)

13

P.W.(A2)

Sub: COMMUNICATIONS - Bridges - South Kanara district - Reconstruction of bridge at mile 65/3 of Kalladka Kanhangad Road - Revised estimate for Rs 66,000/- Approved.

Ref: G.O.Ms.No.2302, P.W., d/1-6-1951.
From the C.E.(H) Lr.No.64449-E1/53-2 dated 10-4-54.

....

G.O.Ms.No. 1846 Dated: 21.5.54.

The Government approve the revised estimate for Rs 66,000/- (Rupees sixty six thousand only) for the work of reconstructing the bridge at mile 65/3 of the Kalladka Kanhangad Road in South Kanara district in lieu of the estimate for Rs 50,500/- sanctioned in G.O.Ms.No.2302, P.W., dated 1-6-1951.

To
The C.E.(H)
The A.G. thro' Fin.
Duplicate copy to
Sri A. Balakrishnan,
A.G., Madras.
(2 Sc)

Note: In G.O.No.2302, P.W., dated 1-6-1951 the Govt. approved an estimate for Rs 50,500/- for the work. The C.E. has stated that an estimate for Rs 51,000/- for the work was technically sanctione by the S.E.(H). He has now submitted a revised estimate for Rs 66,000/- for the work. The revised estimate exceeds the original estimate for Rs 50,500/- by 30.7 per cent. The excess is reported to be mainly due to acceptance of high premium tender rates and also due to certain additional items of work of minor nature found necessary.

Though the bridge lies on the alignment of the West Coast Road the Govt. of India have not agreed to meet 50 per cent of the cost of this bridge work as it has been undertaken before they approved the alignment of the West Coast Road. The entire cost is, therefore, to be met from State funds

The draft order overleaf is for approval.

Finance may see for acceptance

B
6/5/54

M
8.5.54

Fin

KW
7.5.54

EB
8/5/54

file

P.W.D. U. O. No.
31945 A/54-1
8/5/54
40108

Finance (Exp. B)

The draft order overleaf may be accepted. (It is reported that the work is nearing completion)

AM
14.5.54

J
15.5.54

DDB
15/5/54

8

M 17/5

PW

ADDITIONAL DEPUTY SECRETARY TO GOVERNMENT
10 MAY 1954
FINANCE DEPARTMENT
45095

17 MAY 1954
PUBLIC WORKS DEPARTMENT

P.W(A2)

The draft order overleaf may issue. (It does not seem necessary to circulate this case to M(W))*

Fin. U.O. No. 45095/EB/54-1
17.5.54.

* Vide F in P2/(W)

A
17.5.54

M
19.5.54

KW

Extract from letter No.WIV-3(15)53 dated 22-1-54 from the Govt. of India, Ministry of Transport, (Roads Wing) to the Secy. to the Govt. of Madras, P.W.Dept., Madras.

xx xx xx

(7)

5. As regard the two bridge works detailed in para 2 above, I am to say that as these works were undertaken and practically completed before the Govt. of India approved the alignment of the section of the West Coast Road on which they lie and as the estimates therefore have not been sanctioned by them, it is regretted that no part of the expenditure on these works can be borne by the Govt. of India.